

PanDA/LSST integration update

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Current status: Grid

- 3 out of 4 of the Grid resources were up (Lancaster was down during the test: power outage)
- LSST jobs were able receive more slots in GridPP and OSG slots for 360 simultaneous running jobs, with Lancaster expected ~450-500 slots for 24 hours, slots number increased ~25/per hour
- Randomly picked 10 catalogs x 9 sensors x 4 rafts, running with “-t 4”:
 - 73% finished successfully
 - 25% finished, but failed to write (all at BNL, bug in pilot, now fixed)
 - 1% failed (seem to be too long, it was killed after 01:02:40:20 of execution, investigating the problem)
 - 1% was resubmitted (investigating, seems that PanDA server did not receive the heartbeat)
- jobs duration out of finished:
 - below 3-10 hours - ~40%
 - 10-26 hours - ~60%

Other news & next steps

- There will be more resources and sites in GridPP (thanks to presentation by Alessandra Forti)
- Will try to run Data Management software, will need help and advices about it
 - mounted it in my personal virtual machine
 - /cvmfs/lst.in2p3.fr not mounted neither in OSG nor in GridPP

Current status: Titan

- DMTCP:
 - manage to make checkpoint with PhoSim
 - working on restore from existing checkpoint

Documentation on job submission

- a draft of a document ready
- still placed in my Evernote, ideas where to post it to?

Grid operations manual for LSST team

[How to receive a certificate](#)

You should contact your certification authority (CA), for example: <https://www.nsf.gov/depart/oiv/oidsp/certificates/request-cert> and follow the steps needed.

You will receive your certificate in p 12 format. Doubleclick on it to add it to System Keychain (Mac OS X) or import it to browser Settings->Advanced->Privacy and security->Manage certificates (Firefox/Chrome).

Save .g12 file to some location. For the following commands

```
openssl pkcs12 -clcerts -nokeys -in <userCertificate>.p12 -out usercert.pem
openssl pkcs12 -nocerts -in <userCertificate>.p12 -out userkey.pem
```

```
# Enter the password for your user key
mkdir ~/globus
cp *.pem ~/globus
chmod 600 ~/globus/userkey.pem
chmod 644 ~/globus/usercert.pem
```

[How to apply for LSST VO membership and roles](#)

Upon certificate retrieval just logging it into system browser open the following link in your browser: <https://certs.csl.cmc.edu/certs/mof/sem/sem2017/1126230> and fill the request to join the membership.

In case of specific rows needed please go to <https://www.tal.gov.il/444/406/969/969object.action> and select the rows needed.

How to create a proxy

If you are using some prepared host at H&M, which has all of the certificates, just run the following command in the command line:

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If you are using your own PC with:

- **Linux:**
 - check that `worms-proxy-info` tool is present, otherwise install `worms-client-openssl-64` and `fetch-07` packages
- **MacOS:**
 - check that `worms-proxy-info` tool is present, otherwise install `worms` and finish all packages